MEMORANDUM

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

*PUBLIC HEALTH SERVICE

**NATIONAL INSTITUTES OF HEALTH

TO : Director/NHL1
Through: Deputy D/NHL1

DATE: Aug. 2, 1973.

FROM : D/DAT

SUBJECT: Reorganization of DTA

At our meeting of 7/27/1973, the question of continuing DTA as a Division of NHLI was considered, and my understanding from this meeting was that pressures from outside NHLI were causative in the decision that it had become too small a unit to carry the intended dominant role of guiding technological development throughout NHLI, and that the means to provide that dominance in technological development throughout was to move some of the key personnel to the Office of the Director/NHLI and to distribute the remainder of the staff of DTA among the categorical divisions of NHLI, with continuing guidance and coordination by the present Director/ DTA.

This judgment on the basis of size alone can be misleading in that the potential of DTA, especially if Dr. Abbrecht should come, is greater now than at any time in the past 17 months, for at no prior time has it been possible to envision harmonious collaboration among the full staff of DTA. It would be gratifying to see this division do so, even though the numbers of scientifically sound people are still desperately short.

If the original objective of this Division, the Artificial Heart, is to be effectively pursued, the people who are essential to that end must be kept together as a working unit. When I came to NIH as a consultant on the problems of the Artificial Heart Program in July of 1971, the problem of biomaterials loomed as the most important. The development of the artificial heart demands solution of the problem of developing a blood interface which does no damage to the blood and a material which suffers no damage from the blood or other tissues and which can withstand the 320 million flexions of a 10-year life in the tissues. Achievement of reasonably harmonious free interchange may now be possible within DTA, but it will not likely be feasible to meld the effort in materials into the rest of the effort toward an artificial heart if the materials activity is put into a separate division of NHLI than the rest of the effort.

The following disposition of activities is formulated in line with your request in spite of the uneasiness expressed above concerning this course.

It is tempting to suggest placement of the biomaterials work in the Division of Blood Diseases and Resources. This would be of great help

to the Division of Blood Diseases and Resources and would solve part of the budgetary problem. Administrative management would have to be so formulated as to assure that I would guide the scientific aspects with the assistance of Dr. Bruck and/or such other materials scientists and hematologically oriented synthetic chemists as may be added.

There are currently 30 contracts in Biomaterials. This is too many for one scientific monitor, even though Dr. Bruck follows them in assiduous fashion. Four of these contracts are concerned with pump bladders and the growth of pseudo-intima on them. These are:

Providence Hospital, Seattle	71-2060	\$100,000	
TECO	73-2915	68,070	(FY73)
Univ. of Mich.	71-2045	80,900	
Abcor	71-2047	76,500	

These appear to be more intimately tied to pumps than to biomaterials and should stay with the Artificial Heart nidus of contracts and personnel provided this is the area in which Dr. Pitzele will be giving scientific guidance.

It is also tempting to suggest that the 4 contracts and half of UBTL which is working on pulmonary or oxygenator problems be placed for budgetary reasons in the Divisionof Lung Diseases. Here again, however, we have recruited an expert in oxygenators in Dr. Pitzele, and it would be folly to remove him from scientific supervision in this area, which he is just bringing to scientific acceptability. These contracts are:

Carnegie-Mellon	73- 2949	\$20,000
Franklin Institute	71-2017	61,500
North Star	71,2364	18,000
Dow Chemical Co.	68-1387	50.000
UBTL (Calc. ca half)	70-2081	497,698

I would guide the scientific aspects with the assistance of Dr. Pitzele in collaboration with men from the Division of Lung Diseases.

The remainder of the contracts now in DTA would most reasonably be transferred to the Division of Heart and Vascular Diseases essentially as a unit. Mr. Altieri and Mr. Powell should reasonably go here with these contracts, and my office, with Dr. Pitzele and hopefully Dr. Abbrecht as components of it, would provide the chief scientific guidance for them.

As to personnel, to be maximally effective in the new role, I wish to be buttressed by Dr. Pitzele and by Dr. Abbrecht, if he joins us for the year, with the freedom to apply their abilities to areas in the categorical division to which I consider them to be most useful to the overall effort in technological development, whether in contracts or grants. I would wish to bring three of the secretarial staff to that office with us.

With regrets at the necessity for breaking up a now well-working team, the following are assignments which might be considered.

To the OD:

Dennis Mrs. Henry
Pitzele Mrs. Gillis
Abbrecht Mrs. Duvall

To the Division of Blood Diseases and Resources
Dr. Bruck Mrs. Selkowitz

To the Division of Heart and Vascular Diseases

Mr. Altieri Mrs. Deutsch

Mr. Powell Mrs. Riley (Librarian)

Dr. Poirier Secretary to replace Mrs. Oremland (Transf.)
Mr. Carrington " " Scherbak (to Israel)

The remainder include the Contract Office and Mrs. Mills, the secretary assigned to that Office from DTA. I do not know what to suggest.

Finally, Mr. Janus, Administrative Officer, is very knowledgeable and could be very helpful to me if he were to be with me.

The laying out of workscopes and protocols and direction as to patterns of monitoring and supervision should be guided from my office. This arrangement should facilitate attraction of more men with arrangements and qualifications such as those of Dr. Abbrecht.

It is not yet clear how my office would relate to the categorical divisions. It would seem appropriate that a part of my role would be to identify areas of needed research and technological development. With this in mind, the proposed RFP would seem properly to be tied directly to my office.*

Interaction with the categorical division Directors cannot effectively be instituted by me, and clarification of the new pattern to these Directors of Divisions must of necessity come from the Office of the Director/ NHLI

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^{*}Physiological Effects of Exposure of Circulating Blood to Pumps and Other Devices. Approval requested July 27, 1973.